

related cases of parthenogenesis among the Acari. Both hypotheses are therefore supported by analogy from a related group. Unfortunately, disintegration has prevented a satisfactory examination of the spermatheca of the Spider in question; but I am inclined to believe that the case is one of agamic reproduction, inasmuch as I can find no lumen in the exuvia through which impregnation could have taken place. Bertkau states ("Ueber den Generationsapparat der Araneiden," Archiv für Naturgesch., vol. 1, year 41, p. 253):—"Nur so viel ist gewiss, dass die Spinnen mit oder nach der letzten Häutung geschlechtsreif werden."

I purpose to continue my investigations on this subject, and hope that others may do the same.

Description of new Species of *Donax* in the Collection of the Author. By SYLVANUS HANLEY, F.L.S.

[Read June 1, 1882.]

(PLATE XII.)

SINCE 1843, when I first described three new species of *Donax*, four important monographs have appeared of this now large genus. The first, by Reeve, strangely ignored the paper I had published in the 'Proceedings of the Zoological Society' for 1845, but figured the same specimens with the same names from the Cumingian collection. The last, and critically the best, is the posthumous production of the late Victor Bertin, who declares that both Reeve and Sowerby have wrongly delineated my *Donax assimilis*. Premising, therefore, that the *Donaces* which follow cannot even be regarded as varieties of any delineated in the four monographs above alluded to (so peculiar are they in their form and proportions), I will proceed to describe them:—

DONAX MESODESMOIDES, n. sp. (Plate XII. fig. 1.)

T. magna, valida, oblonga, satis convexa, curvato-subcuneiformis, valde inæquilateralis, nitida, lævis, sub epidermide cinereo-flavescente extus omnino candida, intus præcipue purpurascens; lateris antici extremitas attenuato-rotundata, lateris postici rotundato-subtruncata. Area postica angusta rugis erectis flexuosis subremotis transversis, lineisque radiantibus humilioribus decussata. Margo dorsalis antice incurvatus, modice declivis; margo ven-

tralis utrinque ascendens, in medio convexus, flexura nulla. Ligamentum breve. Dentes laterales nulli.

Long. 1·5, lat. 1 poll. *Hab.* — ?

This unique and aberrant species reminds one of a young *serra*; but its contour is much more curved and elongated. Although smooth to the eye, its hinder surface, under the glass, exhibits faint radiating striolæ towards the ventral margin. I suspect that in a younger stage the marked radiating striæ upon the blunt umbonal ridge are not developed.

DONAX LISTERI, n. sp. (Plate XII. fig. 2.)

T. abbreviato-trigona, subinæquilateralis, sublævigata, intus purpurea, extus omnino albido-purpurascens, zonis saturatoribus remotis ornata, antice subventricosa (seu convexa), postice subcompressa; area postica rugis concentricis tenuibus, striisque numerosis inconspicuis arcuatis decussatim scabra. Margo dorsalis utrinque (præsertim postice) declivis et subrectus; margo ventralis haud crenatus. Dentes laterales satis manifesti.

Long. 1·15, lat. 1 poll. *Hab.* — ?

This rare shell, formerly in Belcher's collection, differs alike from, yet resembles, that figure in Lister (pl. 391. fig. 230) from which, and the words "extus intusque purpurascens," Gmelin fabricated his *Tellina purpurascens*, and from the *Donax compressus* of Lamarck:—from the former, which is also more equilateral, by its less cuneiform hinder termination; from the latter in being rounder and much higher from the beak to its opposite edge, and by being less peaked in front. I observe that the two shells are confounded in the more recent monographs, and the expressive and well-defined Lamarckian species is suppressed in favour of a name based upon a figure which does not even exhibit a hinge, so that its very genus is problematical: if a *Donax*, it is more like Reeve's figure of *deltoides*. The hinder sculpture in our unique specimen has a tendency to overlap the obtuse umbonal ridge near the ventral edge.

DONAX FLAVIDUS, n. sp. (Plate XII. fig. 3.)

T. subcordato-trigona, abbreviata, valde inæquilateralis, antice compressa et rotundato-acuminata, postice brevis et subventricosa; extus flavescens, intus albida, haud radiata, aut maculata, nitida, lævis, sed extremitatem posticam versus transversim sulcata seu plicata. Costa umbonalis nulla. Margo posticus convexus; margo ventralis postice subgibboso-arcuatus, intus subcrenulatus. Dentes laterales satis manifesti.

Long. 0·5, lat. 0·4 poll. *Hab.* Borneo (teste *Geale*.)

Its aspect and general tint recall the half-forgotten *D. stramineus* of Gmelin, a shell fairly defined, from its combined figure and description, by Schröter. It does not display, however, the purple stain on the hinder slope, and widely differs in outline. The grooves are feebly decussated by minute radiating lines at the broader end (which is oblique, rounded below).

Darwin's figure of *Lepas crassa* conveys the impression of the general shape (except the posterior outline) of this very rare shell, of which I have never seen but one example.

DONAX IMPAR, n. sp. (Plate XII. fig. 4.)

Testa parva, maxime inæquilateralis, valde elongata, compresso-cylindracea, antice rotundato-acuminata, postice brevissima et abrupte truncata, candida, polita, omnino lævis, nisi ad aream posticam planam aut concavam, ubi concentrice est sulcata. Margo dorsalis anticus vix declivis; margo ventralis haud crenulatus.

Long. 0·7, lat. 0·2 poll. *Hab.* Beloochistan (*Blanford*).

The nearest approach to this remarkably elongated shell is *D. Owenii*; but the present is still more inequilateral. I possess only a single valve; but as it is in fine preservation, and as in the section *Machærodonax* both valves are alike, I venture to describe it; the colour, however, may vary.

In the plate I have added a few illustrations of species of *Leptomya* &c. hitherto unfigured.

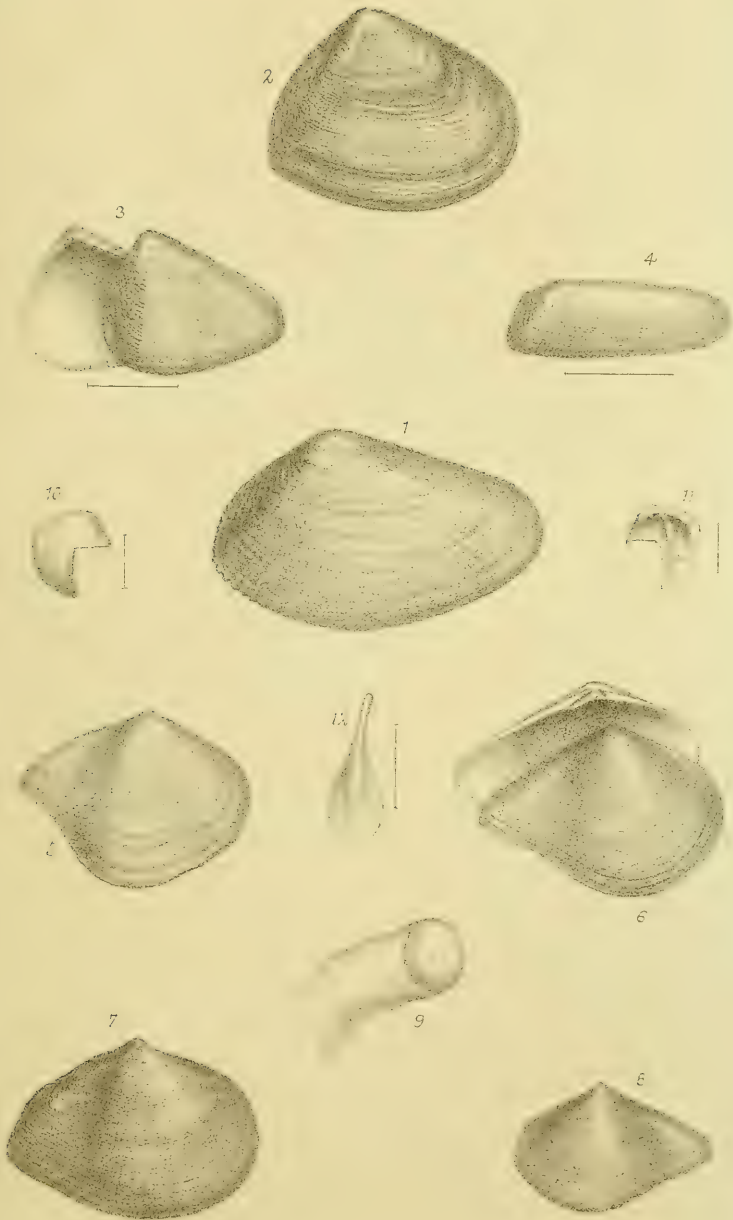
DESCRIPTION OF PLATE XII.

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| Fig. 1. <i>Donax Mesodesmoides</i> , n. sp., nat. size. | Fig. 7. <i>L. spectabilis</i> , slightly enlarged. |
| Fig. 2. <i>D. Listeri</i> , n. sp., nat. size. | Fig. 8. <i>L. cochlearis</i> , Hinds, nat. size, from unfigured type in the British Museum. |
| Fig. 3. <i>D. flavidus</i> , n. sp., enlarged. | Fig. 9 to 12. <i>Teredo uticulus</i> , Gmel., valves and pallets, the latter en- larged. |
| Fig. 4. <i>D. impar</i> , n. sp., enlarged. | |
| Fig. 5. <i>Leptomya gravis</i> , Hanley, nat. size. | |
| Fig. 6. <i>L. psittacus</i> , Hanley, nat. size. | |

On a new Genus of Collembola (*Sinella*) allied to *Degeeria*,
Nicolet. By GEORGE BROOK, F.L.S.

[Read June 15, 1882.]

THE genus *Degeeria* was founded by Nicolet, in 1842, for the reception of those species of the old Linnean genus *Podura* which have the antennæ shorter than the body, consisting of four subequal segments and a minute basal ring, abdomen tapering, with the fourth abdominal segment longer than the three preceding taken together. The specimens here described were collected



Berjeau lith.

Hanhart imp.

NEW SPECIES OF DONAX, & Species of LEPTOMYA With Valves & Pallets of TEREDO UTRICULUS.